

# Refuge used new strategy for the Fox Creek and Irish Channel Fires

by Doug Newbould

While 2005 was an exceptional fire season for the Refuge and the Kenai Peninsula, one which tested our mettle in many ways, it provided us with opportunities to manage wildfire using a new strategy. This wild-fire management strategy, which is not really new—but which has not been used until recently in Alaska, is known as ‘wildland fire use’ or WFU.

Wildland fire use can be defined as—the management of naturally ignited (usually by lightning) wildland fires to accomplish specific pre-stated resource management objectives in predefined areas outlined in Fire Management Plans. In fact, WFU is mandated by Department of Interior wildland fire management policy (620 DM 1): “Wildland fire will be used to protect, maintain, and enhance natural and cultural resources and, as nearly as possible, be allowed to function in its natural ecological role.”

The term, wildland fire use, is relatively new although the strategy has been used on some federal lands in the United States since the late 1960s. The National Park Service was the first federal land management agency to allow natural fires to burn in specific areas of some national parks, especially in wilderness areas. This strategy some referred to as the ‘Let Burn Policy’ came to be known as ‘Prescribed Natural Fire’ (PNF).

However, both of those terms were unpopular with the fire management community. So, after the 1988 Yellowstone fires generated a national debate about wildland fire management policies and strategies (a debate that has continued for most of two decades), national fire policies changed and so did some of the terminology. One of the new terms is Wildland Fire Use, which replaced the technical term—PNF and the politically-incorrect ‘Let Burn’.

So, even though the terminology has changed and the management strategy has matured over the years, the underlying philosophy for WFU and its purposes have not changed. I guess one could say that the (inappropriate) names have been changed to protect the innocent (good policy). And now, because it is widely recognized as good policy, WFU is utilized (where des-

ignated by approved fire management plans) by every federal land management agency in the United States.

Those of you who are familiar with wildland fire management in Alaska might ask, “How does WFU differ from other fire management strategies or options, such as Limited suppression?” Well, I must admit there are similarities between WFU and Limited suppression. Both are designed to provide public and firefighter life safety and protect private property and other important values at risk. And both tend to reduce costs by limiting the use of aggressive firefighting tactics.

But there are also important differences. Compare the definition given above (WFU) with that of suppression: a management action intended to protect identified values from a fire, extinguish a fire, or alter a fire’s direction of spread. By national policy, all wildland fires caused by humans are classified as unwanted wildfires that must be suppressed. And land managers are mandated to investigate any wildfire to determine cause, origin, and responsibility. WFU may only be an appropriate management response for some naturally-ignited wildfires and is not an option for human ignitions.

Again, WFU is a strategy used to accomplish specific resource management objectives, such as: reduce hazardous fuels, restore or maintain fire-adapted ecosystems, prevent or alter the spread of future unwanted wildfires, or protect wilderness values. Suppression is a defensive strategy, while wildland fire use is offensive. WFU is proactive, while suppression is reactive. The difference is really a matter of management perspective.

With WFU, the land manager asks the question, “How can we manage this unplanned natural wildfire to meet our land and resource management objectives and agency purposes?” With any suppression response, the land manager asks, “How can we manage this unplanned unwanted wildfire to minimize the risks to human life and property, minimize the environmental impacts of suppression activities and minimize suppression/rehabilitation costs?”

Congress has recognized the differences between

WFU and Suppression. They see that nationally, WFU costs much less per acre than wildfire suppression and Doug Newbould has lived and worked on the Kenai Peninsula since 1991 and has been the Fire Management Officer at the Kenai National Wildlife Refuge since 1999. Costs much less per acre than mechanical fuel reduction. Also, wildland fire use generally produces ecological benefits while suppression activities can produce adverse environmental impacts.

Of the 12 lightning fires on the Refuge in 2005, five started in designated Wilderness areas but only two were managed as WFU fires: the 1,000-acre Irish Channel Fire and the 26,300-acre Fox Creek Fire. Both fires started in remote wilderness areas, where values at risk were at least somewhat minimized.

The three wilderness lightning fires that were suppressed included the 10,300-acre King County Creek Fire, the 0.2-acre Brown's Lake Fire and the 13.5-acre Moose Lake Fire. The first two were suppressed because of the risk to communities (Funny River and Sterling), the third was suppressed because it threatened to overrun the Moose Research Center.

The decision to manage the Irish Channel Fire under the WFU strategy was a relatively simple one for Refuge Manager, Robin West. A lightning storm on July 6<sup>th</sup> ignited several fires on the Peninsula, including a fire at the east end of Skilak Lake on a rocky knob south of Lucas Island. Surrounded by natural barriers (Skilak Lake to the north, the braided glacial Skilak River to the east, alpine vegetation to the south and the 2003 Pipe Creek Fire scar to the west), the Irish Channel Fire essentially had nowhere to go.

The resource management objectives identified for Irish Channel were to allow the fire to play its natural ecological role and to protect wilderness values while ensuring public and firefighter safety. In all, the fire burned for three months, consuming about 1,000 acres of mountain hemlock and spruce forest in the Andrew Simons Wilderness Unit. The only costs attributed to the management of the Irish Channel Fire were for planning and surveillance.

The decision to manage the Fox Creek Fire under WFU was not nearly so simple. The Fox Creek Fire was ignited by lightning sometime on or before July 11<sup>th</sup>, when it was first discovered burning in remote Wilderness, in black spruce and beetle-killed white spruce south of Big Bay, which is about midway along the southwest shore of Tustumena Lake.

And although there were impenetrable natural barriers to the north (Tustumena Lake) and the east

(the Kenai Mountains), and substantial vegetation barriers to the northwest (the 1996 Crooked Creek Fire scar) and southwest (the Caribou Hills), the fire was within one of the largest continuous fuelbeds on the Kenai Peninsula—about 125,000 acres of beetle-killed white spruce and live black spruce. And there was one potential route of escape for the fire if it decided to burn west across the Nikolai and Crooked Creek drainages. This doorway to the west became known as the 'Gate.'

Because of the fire's potential to get very large and possibly threaten structures in the Ninilchik Forties/Caribou Hills (if it got through the Gate) and because it could last for two or three months, an Alaskan Type-2 Incident Management Team was ordered to help us manage the incident. But during the situation analysis, when the land manager must decide whether to suppress a lightning fire or manage it for resource benefits, perhaps the one factor that tipped the scales towards WFU was named Mary Kwart.

Mary is the Assistant Regional Fire Management Coordinator and Wildland-Urban Interface Specialist for the U.S. Fish & Wildlife Service in Alaska. She is a fully-qualified and experienced Fire Use Manager (FUMA), and it just so happened that she was in Soldotna (helping us manage the Irish Channel WFU Fire) when Fox Creek started. Without a qualified FUMA, we could not have managed the fire as WFU, and the chances were slim we could order a FUMA to be part of the incident management team in a timely manner.

Still, even with Mary on board, I'm not sure Robin slept much during the first several days of the Fox Creek Fire. I know I didn't. When the smoke finally cleared, the fire had burned about 26,300 acres of black spruce and beetle-kill, making it the largest wildfire on the Kenai Peninsula since 1969. But, I'm happy to report that all of the natural barriers held, no firefighters were injured and no structures were lost. Even the historic Big Bay Cabin was saved from almost certain destruction, if not for the valiant efforts of the Refuge fire crew under the expert leadership of Assistant Fire Management Officer, Dianne MacLean.

The only negative incident during the successful management of the Fox Creek Fire occurred when the large smoke column from the fire collapsed on Anchorage for about six hours, making some folks very unhappy. The good news is that no injuries or illnesses resulted from the smoke event. Less than a million dollars were spent managing the Fox Creek WFU Fire. By contrast, suppression costs for the King County

Creek Fire, a fire less than half the size of Fox Creek, amounted to nearly 4 million dollars.

The lightning we experienced in 2005 and the number of lightning fires that occurred are unprecedented, at least here on the Kenai. But if it is true that lightning fires are on the increase, then it is my hope that the wildland fire use strategy will always be in our fire

management toolbox.

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